

BEST AVAILABLE COPYAmendments to the Claims:

Claim 1. (Currently Amended) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a gene that encodes a mammalian polypeptide having at least ~~85% homology~~ 95% identity to SEQ ID NO:54 and that functions in insulin signaling; and

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said gene following contact of said *C. elegans*, or said isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition.

Claims 2-12 (Canceled).

Claim 13. (Previously Presented) The method of claim 1, wherein said gene is a human gene.

Claims 14-16 (Canceled).

BEST AVAILABLE COPY

Claim 17. (Currently Amended) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a gene that hybridizes under highly stringent conditions to the complement of a nucleic acid sequence encoding the sequence of ~~SEQ ID NO:54~~ SEQ ID NO:57 or SEQ ID NO:102 and that functions in insulin signaling;

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said gene following contact of said *C. elegans* or said isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition.

Claim 18 (Canceled).

Claim 19. (Previously Presented) The method of claim 17, wherein said gene is AFX

Claim 20. (Previously Presented) The method of claim 17, wherein said gene is FKHR.

BEST AVAILABLE COPY

Claim 21. (Previously Presented) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a human FKHR gene; and

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said FKHR gene following contact of said *C. elegans* or isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition.

Claim 22. (Previously Presented) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a human AFX gene; and

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said AFX gene following contact of said *C. elegans* or isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition.

BEST AVAILABLE COPY

Claim 23. (Previously Presented) The method of any one of claims 1, 17, 21, and 22, wherein said glucose tolerance condition is atherosclerosis.

Claim 24. (Previously Presented) The method of any one of claims 1, 17, 21, and 22, wherein said glucose tolerance condition is obesity.